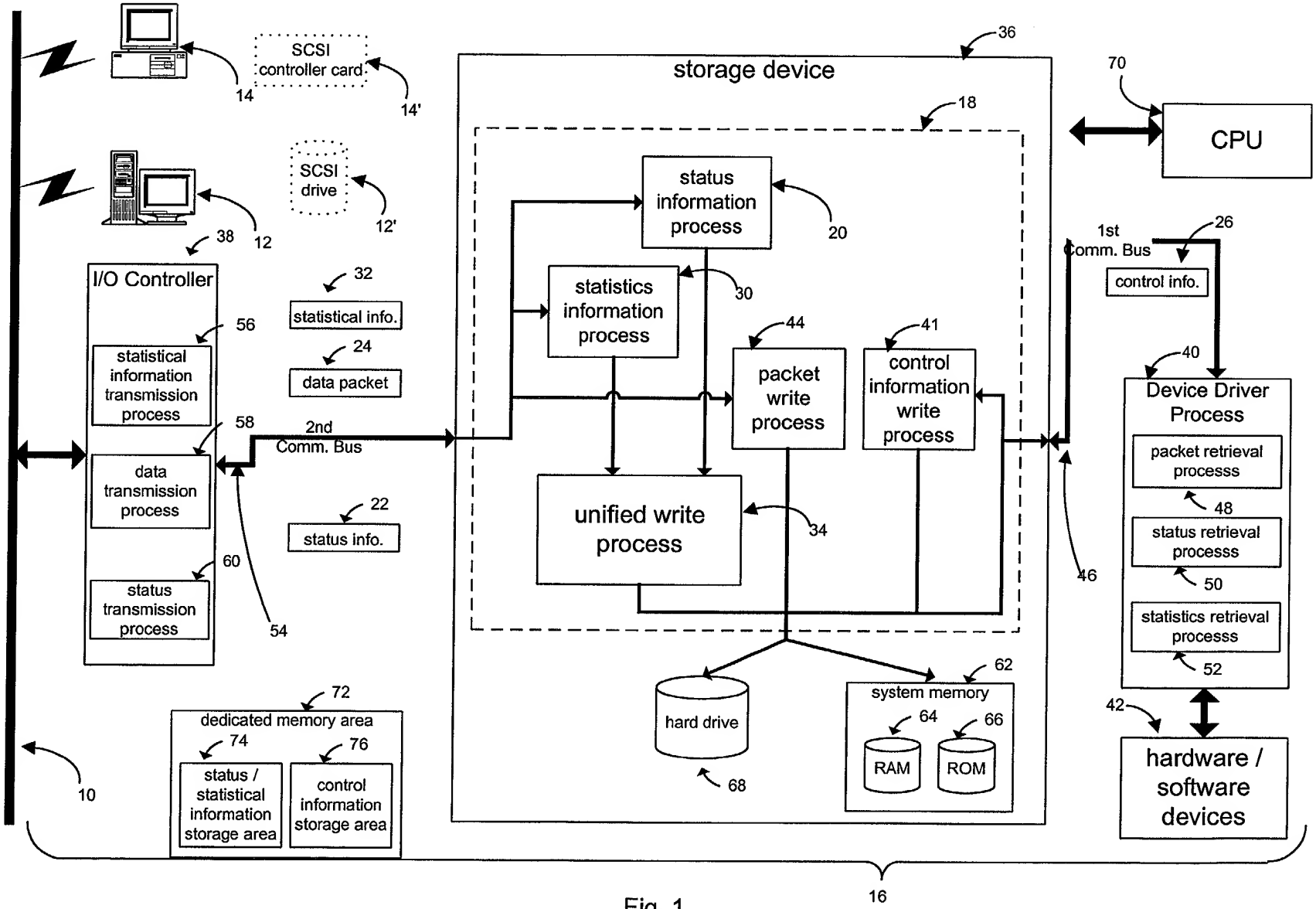
SCSI controller card
14
14'
SCSI drive
12'
12
38
I/O Controller
32
statistical info.
56
statistical information transmission process
24
data packet
58
2nd Comm. Bus
data transmission process
22
status info.
60
status transmission process
54
10
72
dedicated memory area
74
status / statistical information storage area
76
control information storage area
16
36
storage device
18
status information process
20
statistics information process
30
44
packet write process
41
control information write process
unified write process
34
hard drive
68
62
system memory
64
RAM
66
ROM
46
70
CPU
1st Comm. Bus
26
control info.
40
Device Driver Process
packet retrieval processs
48
status retrieval processs
50
statistics retrieval processs
52
42
hardware / software devices

Fig. 1

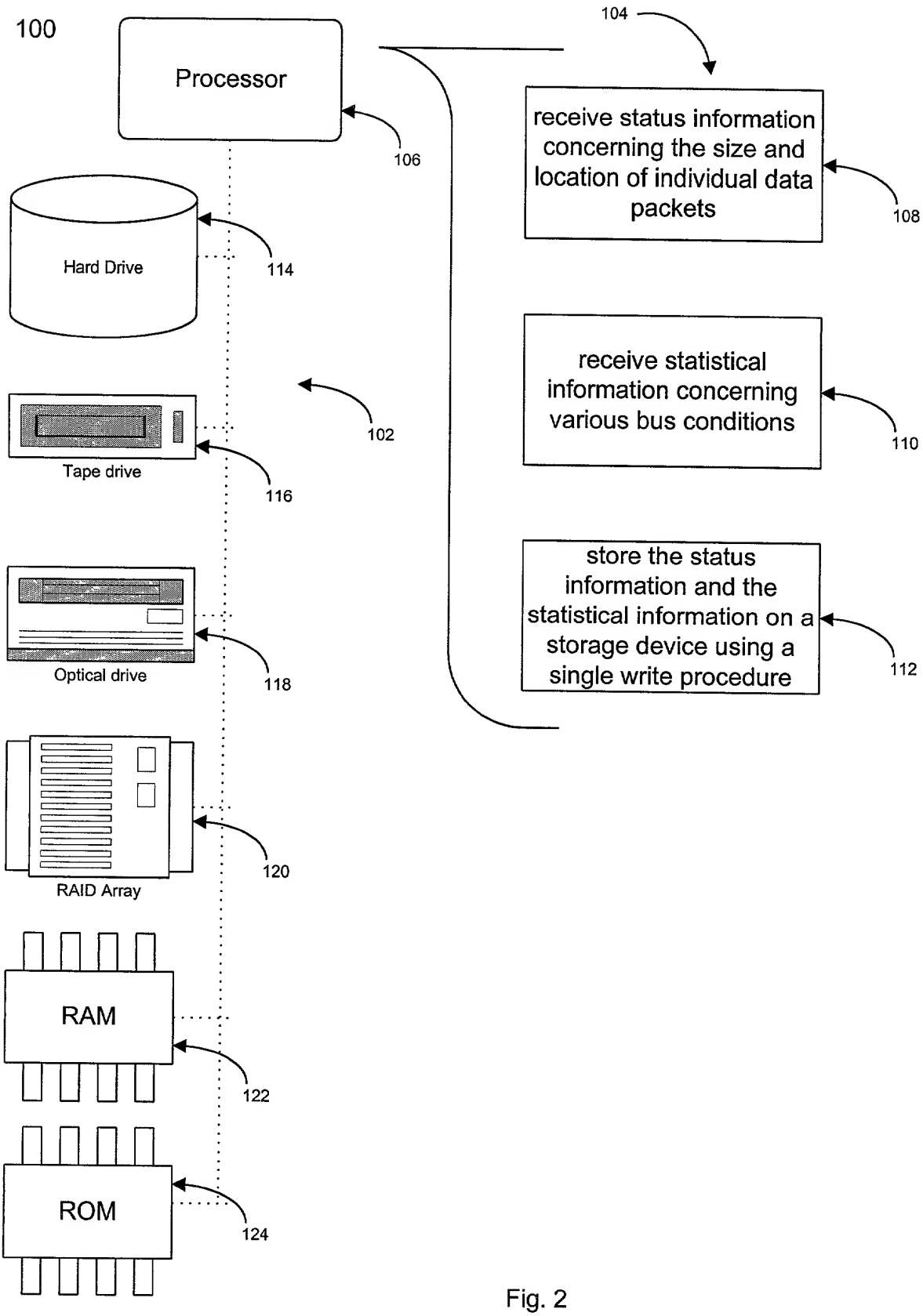
100
Processor
106
104
receive status information concerning the size and location of individual data packets
108
Hard Drive
114
receive statistical information concerning various bus conditions
110
102
Tape drive
116
store the status information and the statistical information on a storage device using a single write procedure
112
Optical drive
118
120
RAID Array
RAM
122
ROM
124

Fig. 2

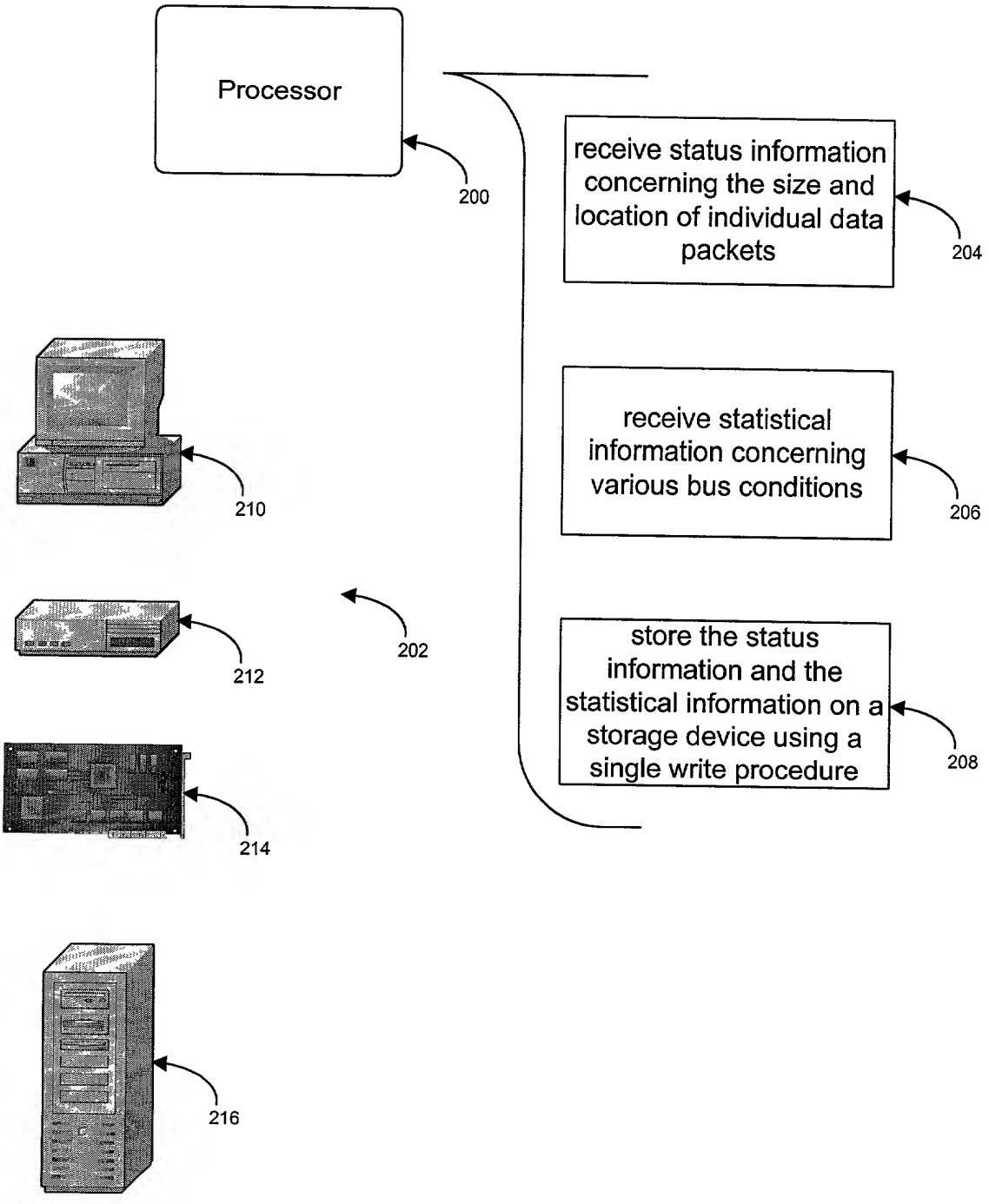
Processor
200
receive status information concerning the size and location of individual data packets
204
receive statistical information concerning various bus conditions
206
store the status information and the statistical information on a storage device using a single write procedure
208
210
212
202
214
216

Fig. 3

300

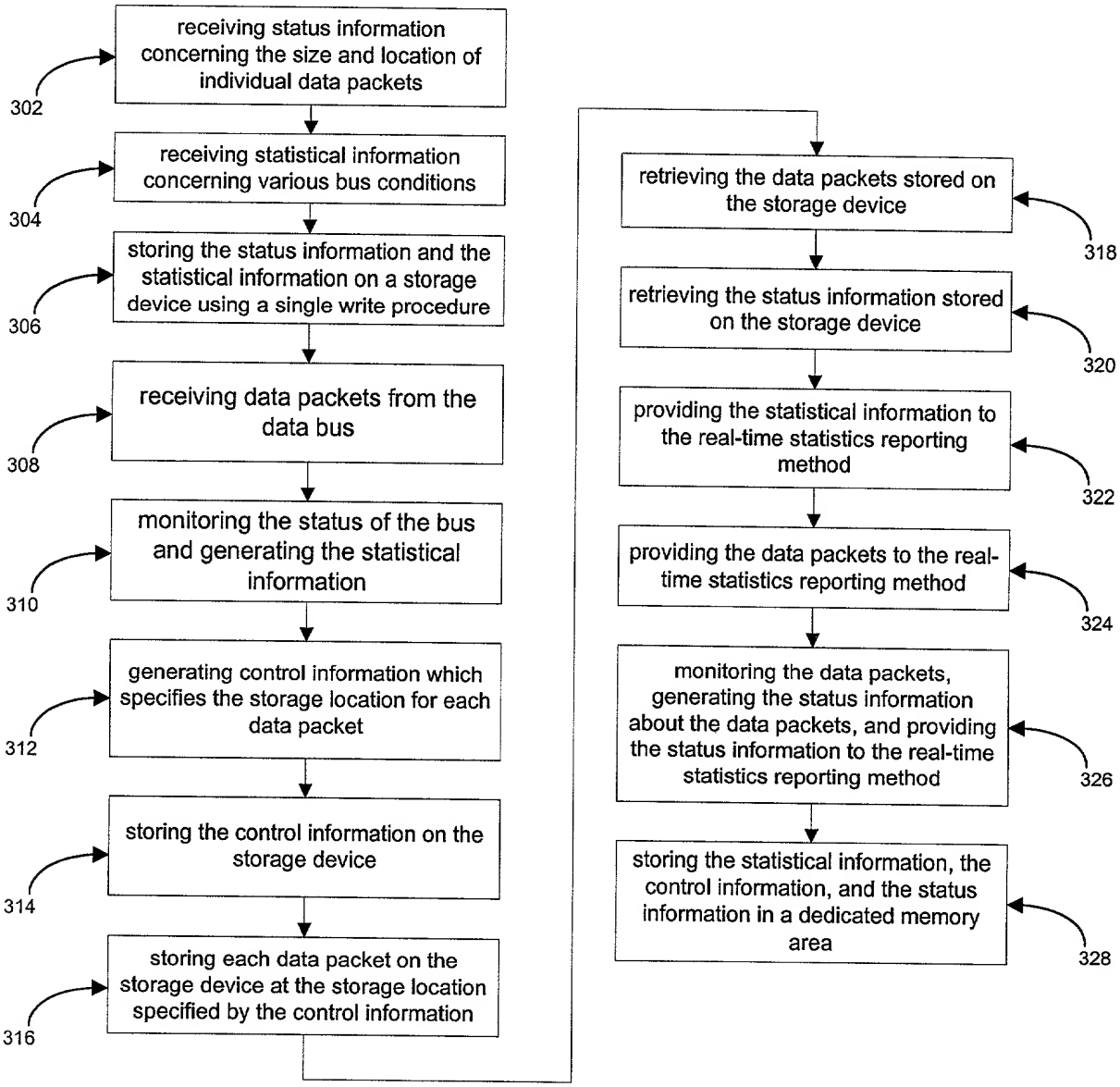
receiving status information concerning the size and location of individual data packets
302
receiving statistical information concerning various bus conditions
304
storing the status information and the statistical information on a storage device using a single write procedure
306
receiving data packets from the data bus
308
monitoring the status of the bus and generating the statistical information
310
generating control information which specifies the storage location for each data packet
312
storing the control information on the storage device
314
storing each data packet on the storage device at the storage location specified by the control information
316
retrieving the data packets stored on the storage device
318
retrieving the status information stored on the storage device
320
providing the statistical information to the real-time statistics reporting method
322
providing the data packets to the real-time statistics reporting method
324
monitoring the data packets, generating the status information about the data packets, and providing the status information to the real-time statistics reporting method
326
storing the statistical information, the control information, and the status information in a dedicated memory area
328

Fig. 4